

North Carolina Department of Environment and Natural Resources Information Technology Plan • FY 2009 – 2011 Biennium October 1, 2008

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I. Introduction

Information technology (IT) in the North Carolina Department of Environment and Natural Resources (DENR) is in a state of transformation. Everything we know or have assumed about IT support of business is being rethought. This "reengineering" began two and a half years ago and is on a deliberate steady path to changing the culture of IT in DENR.

Years prior, DENR established an IT architectural framework to reduce our broad suite of platform dependencies and enable various business units within DENR to share data. But in many ways, this was putting the cart before the horse. Technology architecture needs the foundation of business driven enterprise architecture (EA). With help and guidance from the North Carolina Office of Information Technology Services (OITS), DENR began formally structuring EA on May 18, 2006.

For our purposes, DENR defined EA as a way to plan IT investments and organize information technology services to generate value to the business units of DENR. Within an EA, IT services and support are synchronized so our business processes work in harmony both within DENR, with other state agencies, and with external partners. Enterprise Architecture is a framework to align and manage the organization's business processes and support them with common shared services.

DENR's IT Plan for the 2009 – 2011 biennium continues the investment in business driven governance and IT service consolidation to support the department's strategic plan and adapt to changing environmental concerns and priorities as they present themselves. Successful EA is not something that is decreed and implemented in the short term. Successful EA is nurtured and grown over a period of years.

In this plan, DENR IT will address:

- Alignment of IT with DENR strategic direction
- · Application and Project portfolio management
- Governance
- Internal IT consolidation
- Concurrent state-wide phase III consolidation



II. Factors Influencing DENR's IT Plan

A. DENR Strategic Plan

DENR is advancing the following themes in the 2008 – 2009 strategic plan:

- · Water for the Future
- One North Carolina Naturally
- Organizational effectiveness

Internal IT Consolidation has prominent focus in DENR's strategic plan under Section 2, Advancing organizational effectiveness (Appendix B). DENR intends to gain efficiencies so that existing resources can continue managing the growing demand for IT support without significant expansion.

The DENR strategic plan depends on technology support to meet several other goals as well. The following are examples of direct IT support for DENR strategic directions:

- The One North Carolina Naturally initiative needs GIS support to project geospatial views of current conservation and resource protection efforts
- The Geographic Information Coordinating Council (GICC) has recommended geospatial data sharing among local state and federal agencies. DENR ITS has put governance in place to facilitate those recommendations
- Water modeling technology is being put in place to support drought legislation
- IT systems are a major impact to energy consumption. DENR ITS is active on DENR's Climate Registry Workgroup to reduce greenhouse gas emissions
- DENR has a priority project registered in the UMT / Project Portfolio Management (PPM) system to create a groundwater decision support system to support the agency's need for integrated information related to protecting groundwater and restoring contaminated sites

B. Funding

Revenue streams are limited whether the source is state appropriations, federal grants, or user-based receipts. Funding availability is likely to go down requiring expense reduction and reduced IT investments.

Agency requests for expansion during the 2009 – 2011 biennium cannot exceed 5% of current budget. The inherent high cost of IT



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compared to other business line items causes a disproportionate burden on the expansion budget and a threat to the funding of remaining business needs.

C. Human Resources

The combination of retirement and retention are factors that affect the continuity of projects and stability of the business knowledge base. Retirement numbers are expected to be high for the next several years with estimated 10 – 30% eligibility in the workplace. Recruitment and retention pressures are rising too. The incoming and available workforce is less oriented toward technology-based careers and the few who are enjoy high demand.

The Office of State Personnel (OSP) has developed a web portal to address the concerns of performance in the 21st century and offer assistance to agencies to meet the challenges of a shrinking and increasingly mobile workforce.

DENR's strategy to begin dealing with this dilemma more effectively is to:

- Seek funds for career banded positions at or above 90% of market index
- Expedite the hiring process so that potential candidates can be hired before exercising other options in a high-demand labor market
- Develop a proper balance between permanent staffs and contractor support to meet near-term demands without delay

D. Technology Enabled Information Access

Across the board, local, state and federal agencies must work together to provide citizen services and information for decision-makers. The State CIO is working with the Information Technology Advisory Board (ITAB) to enhance the state portal for access to state services without traditional agency boundaries. An enhanced state portal will optimize technology's role in supporting the business of government.

Some of the pressures DENR must address for information access include but are not limited to:

- Citizens want online information about environmental impact to their community
- Security concerns drive limited dissemination of sensitive information
- State agencies with shared support roles must make their data available to each other for best response
- Citizens deserve greater accountability and transparency
- · A mobile workforce requires remote capabilities.



III. Applications, Projects, and Management Functions

A. Applications Portfolio Management

DENR's portfolio includes an inventory of two hundred and sixteen (216) applications. These applications are maintained according to a schedule of enhancement, replacement, consolidation or retirement as described in the UMT / Application Portfolio Management (APM) System.

Current State: Eighty-nine (89) DENR applications are scheduled for retirement within the 2009 – 2011 planning biennium. All but six (6) are identified as either program, department or statewide critical.

Future State: DENR is best served by modernizing and aligning the various legacy applications within the current departmental IBEAM (Internet Based Enterprise Application Management) framework.

Change State (getting from current state to future state): DENR will review applications and develop a priority order for resolution based on the following criteria:

- Failure risk of current application(s)
- Similarities among applications across DENR (candidates for combined replacement)
- Mission support criticality
- Funding availability

Barriers to Success: Many of the legacy applications identified work reliably and are low priority for near term enhancement. Without imminent failure or major security risks, the business units are unable to justify the cost of enhancement for most applications.

Several legacy applications dealing with groundwater data management will be enhanced by the Groundwater decision support system discussed in the project portfolio section of this plan (see II. B. 3.).

One DENR legacy application, the Agriculture Cost Share Database, is being enhanced because it meets the above listed criteria:

Agriculture Cost Share Program Database Enhancement

The Agriculture Cost Share Program Database is a primary mechanism for tracking and documenting benefits of agricultural nonpoint source best management practice (BMP) implementation in North Carolina (including EPA Section 319-funded implementation



projects in 303(d) and TMDL implementation watersheds). Over the last 5 years, BMP implementation utilizing the ACSP tracking system infrastructure has averaged nearly \$8.3 million per year. The current ACSP database system was developed in 1998 and now contains over 44,800 best management practice contracts. The system requires significant data entry at the state level and considerable duplication of effort (redoing the work completed at the district level), to ensure effective documentation of contracted funds and associated water quality benefits. The current system lacks a mechanism to include supplemental documentation (e.g., GPS coordinates, digital photographic documentation) of installed practices that would lead to better reporting of practices and environmental benefits.

A proposed system upgrade will permit more efficient on-line contracting and contract approval to eliminate duplicative data entry and shorten contract review and approval time. The proposed system will include a mechanism to attach GPS and GIS information, and digital photographs to better present the benefits and outcomes associated with BMP implementation. Another benefit of this upgrade will be more compatibility among databases in different divisions in DENR. This will lead to more comprehensive understanding of activities (BMPs, developments, etc) or lack of activities in specific watersheds, and better water quality projects in the future. This updated database will allow DSWC to provide more information to DWQ about planned and implemented best management practices, and their associated water quality benefits. The modified system will permit more accurate and timely accounting for the benefits of practices installed using EPA 319 funds and other funding sources to present a better overall picture of progress in watersheds subject to TMDLs, 303(d) listing, and others.

The upgrade will be developed using the DENR – IBEAM framework. This Project will focus on converting the existing cost share system (CSS) developed in the late 1990s to a DENR standard Java/Oracle infrastructure. Enhancement will be made to automate contract development process and enable paperless electronic submission and approval of contracts. The enhanced application will be able to completely process existing contracts that do not contain data required for new contracts.

B. Project Portfolio Management

DENR has no changes from current portfolio information found in the UMT/PPM Tool. Likely, there will be adjustments to projects within the planning years 2009 – 2011. Project changes will be managed within the UMT/PPM Tool as they present themselves.



For specific projects listed in this section, brief descriptions are given without cost, benefit and project schedule data. These and more details are included in the UMT/PPM Tool.

Current State: DENR currently manages thirty-four (34) projects in the UMT portfolio management system.

- · 4 initiated
- 1 in planning and design
- 1 in project closeout
- 1 in implementation
- 8 complete
- 1 completed EBR
- 1 canceled
- · 2 on hold
- 5 previous expansion budget requests
- 1 Governor's Certified Budget
- 1 IT plan from 2007 2009

Future State: DENR's Technology Architecture (IBEAM) will be the framework for significant business application support. The TMC will review project requests, understand similarities and business goals and select the best projects for the most benefit to the organization.

Change State (getting from current state to future state): DENR will identify lines of business for similarity and compatibility for joint technology development. Priorities will be defined by the TMC.

Barriers to Success: Many projects are identified "just in time" using current funding with little time to incorporate the level of review needed to expand the view of other business needs.

The following projects in DENR's project portfolio represent multiple business interests within DENR collaborating to meet their individual and shared needs within the Enterprise Architecture Framework:

1. Digital Imaging Project

The Digital Document Imaging Project is a collaborative effort among DENR divisions to standardize and automate our approach to document imaging, access, and storage. DENR will use business policy and standards to manage documents and technology to facilitate the scanning of paper documents. The goals of this project are:

Reduced paper use



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- Reduced file storage space
- Automated document generation, storage and archive, retrieval, work flow management (streamline - business processes such as permitting and enforcement)
- Improved security
- Acceptance & use of electronic signatures for external document authenticity
- Meet Legislative and EMC requests for documents in digital format
- Meet record center requirements

2. Permit / Enforcement Collections Management Tool

The project deliverable is a functional collection system interfacing with IBEAM infrastructure to enable downloading of relevant data to produce collections reports. The Collections software will enable the Collections center to:

- Provide month-end delinquency reports by division and generate delinquency notices as needed
- · Record pertinent data in the Collections field for all accounts
- · Identify accounts forwarded to legal and provide reports
- Provide a large portion of the information that is necessary for the DENR Environmental Regulatory Compliance Activity Report
- Allow divisions to see the status of accounts at any given time and generate needed reports
- Generate daily or weekly batch processing which will show the allocations of all civil penalty payments.

3. Groundwater Decision Support System

The goal of this project is to develop and implement a data management system that allows DENR Divisions of Waste Management, Water Quality, Environmental Health, and Water Resources to manage groundwater data in a comprehensive manner that is electronically accessible by local/state/federal agencies and a component that allows for public access of data.

4. Integrated Tier II/FRS/TRI Spatial Data Publishing Network and Portal

The Emergency and First Responder Community does not have a viable system to provide spatially enabled data for making real time decisions in an emergency. The Tier II/FRS/TRI portal will allow DENR to extend the current exchange network to include the Emergency Management and First Responder Community. The information accessible via this portal will reside in an integrated database that consists of information from the North Carolina



Emergency Management (NCEM) Tier II HAZMAT Inventory database, the DENR Facilities Registry (FRS) and the Toxic Release (TRI) Inventory database.

Extension of the Network will improve the quality of data, reduce the Tier II reporting burden on the facility owners, and provide for a timely submission of data to improve decision making and response to environmental issues.

NC DENR's and NCEM's goal is to improve both public safety and environmental protection. This goal is achievable via a data exchange standard and web services framework that will more effectively manage and publish geospatial data, integrating Tier II hazardous chemical inventories with the Facility Registry System and the Toxic Release Inventory.

5. NC OneMap

NC OneMap is an initiative of the North Carolina Geographic Information Coordinating Council (GICC). The Center for Geographic and Information Analysis (CGIA) serves as staff to the GICC in implementing the goals and objectives of the Council. CGIA staff is responsible for the development and maintenance of NC OneMap. Policy and strategic development are addressed by the CGIA Director in close cooperation with the Council. The implementation and maintenance of the NC OneMap infrastructure are the responsibility of the CGIA Technology Team, composed of key CGIA information technology staff. Additional staff developed through this project (one Business and Technology Applications Specialist and one Business and Technology Applications Analyst) will be integrated with the CGIA Technology Team.

GIS data resources exist in almost every local, regional and state government entity across North Carolina representing an investment of more than \$160 million. These datasets cannot be easily accessed without contacting each individual city and/or county and ultimately are underutilized as stand alone products. NC OneMap brings these resources together over the Internet to facilitate multi-jurisdictional, regional and eventually statewide views of geospatial datasets. Facilitation of this access can support decision makers and business requirements at all levels of government, the private sector, and the general public. These data resources are suitable for a variety of applications including emergency response, highway planning, environmental permit review, land conservation activities, and economic development.



The business goal for NC OneMap is to facilitate access to geospatial data to support decision making, serve as an infrastructure to support business requirements in the public and private sector, and maximize the investments of NC OneMap participants through improved efficiencies and reducing redundant data collection and maintenance programs.

The business goals of this project will be to (1) develop a system architecture and implementation plan to support robust and efficient operations of the NC OneMap infrastructure; (2) provide outreach and technical support to new and current NC OneMap connections with local governments across North Carolina; and (3) provide dedicated personnel to the maintenance and support of NC OneMap infrastructure.

NC OneMap will provide substantial benefits to state government and the entire stakeholder community by leveraging investments from state and local government via the Internet to facilitate multijurisdictional, regional and eventually statewide views of geospatial datasets. This access can support decision makers and business requirements at all levels of government, the private sector, and the general public. These data resources are suitable for a variety of applications including emergency response, highway planning, environmental permit review, land conservation activities, and economic development.

The deliverables for this project will be (1) a system architecture design document and implementation plan that addresses the infrastructure requirements of NC OneMap; (2) robust NC OneMap functionality to support 24/7 performance such as a services polling utility and ability to serve data from an active archive; (3) increase the number of local government participants in NC OneMap by connecting at least twenty (20) new communities annually; (4) provide technical assistance to local government participants already connected to NC OneMap; and (5) establish and fill two positions dedicated to NC OneMap support and enhancement.

C. Management Functions

1. IT Governance

DENR has developed a structure to foster representation by all business interests in the direction and alignment of technology in DENR. The structure also monitors and enforces adherence to DENR's policy standards and procedures.



Current State: The Technology Management Committee (TMC) is chartered and functioning as the highest level of business influence over technology in DENR. The TMC ensures business involvement in IT decision-making through high-level committee representation (i.e. division directors) and supports the Enterprise Architect in managing the EA. The TMC helps the DENR CIO and the Enterprise Architect prioritize IT projects using criteria developed through the EA. The TMC oversees the development of technology standards in DENR. Members are appointed by the Secretary of DENR and / or Deputy Secretary. Committee Chair is selected by members and rotated annually.

The Technology Advisory Committee (TAC) reports to the TMC and supports the TMC through ad hoc workgroups (e.g. Document Management, Portable Computing). The TAC is represented by members of each division's steering team and active chairs for GeoTeam and WebTeam. When divisions do not have an organized steering team, staffs with business knowledge and IT interest participate. When requested by the CIO or the TMC, the TAC will do the following:

- review exceptions to EA standards and advise based on the overall DENR business need
- review and recommends priorities for projects in progress
- make business, technical and solutions standards proposals (i.e. architectural content proposals)

Future State: The DENR Governance System will benefit from the input of every division through their individual division steering teams and through their collective participation on ad hoc and permanent departmental committees.

Change State (getting from current state to future state): The DENR Project Management Office will work with directors in each division seeking application development setting up initial steering teams when not already existing. These teams will be modeled after existing steering teams that currently function at a mature level in some divisions. The divisions will be encouraged to send a steering team representative to the Technology Management Committee and to participate in the GIS standing committee (called GeoTeam) and the Web Services standing committee (called WebTeam).

Barriers to Success: None Identified



2. IT Consolidation (internal) and State-Wide Phase III Consolidation of Desktop, Servers and Networks

Current State: DENR consolidated all IT staffs and programs on July 1, 2008 under a new organization which manages all projects with technology support and all technology services to the business clients. At the same time, OITS named DENR as one of the agencies to be included in phase III consolidation of desktop, servers and networks.

A key part of internal consolidation was planned to be the standardization of networks and consolidation of data centers. However, this aspect of the consolidation is tentative pending a better understanding of the anticipated state-wide phase III consolidation. Current assets have been determined (Appendix C) and sent to OITS for evaluation under phase III consolidation

Future State: In the next year, DENR should see clear delineation between internal responsibilities and State OITS phase III responsibilities. DENR should expect optimized desktop support as a utility under Phase III consolidation and be able to focus on the department's application support environment with better attention to project management through the UMT/PPM system. Funding restrictions should be overcome by establishing a departmental billing rate.

Change State: DENR will continue stabilizing the internal environment for project management, application development and business and technology support. DENR will work with OITS to understand and facilitate phase III consolidation with a goal to minimize business disruption. DENR will establish an ad hoc study committee to better understand the benefits and risks associated with phase III consolidation.

Barriers to Success: Interim confusion exists over how much DENR should continue with infrastructure standardization prior to state-wide phase III consolidation.

3. Application Organization Maturity

On March 26, 2008, DENR met with OITS and Gartner representatives to test an assessment tool designed to evaluate how well an organization manages applications. The exercise was designed to help us gauge the maturity of DENR's application organization in eight discipline categories.



The eight categories are:

- Application Portfolio Management (APM): activities driving responsiveness to business value, cost, performance and risk associated with applications.
- Project Portfolio Management (PPM): activities driving allocation of resources to and prioritization of projects.
- Management of Staffing, Skills and Sourcing: how well we manage people across the organization.
- Management of Financial Analysis and Budgets: use of financial models based on estimation, spending and other factors.
- Vendor Management: adopting sound practices to ensure optimal vendor performance to receive desired services and products.
- Management of Architecture: shared responsibility with enterprise architecture and security groups to focus three viewpoints (business, information and technical) into application solutions.
- Software Process: documenting repeated activities within limited ("just enough") processes recognizing that one size does not fit all.
- Operations and Support: the application organization's on-going role in maintaining applications once in production

The maturity level is identified within five levels:

- Level 1 Ad hoc: individual approach without specified processes therefore lacking repeatability. Every project starts from scratch.
- Level 2 Repeatable: established processes within work units, but little consistency across the application organization. The eight disciplines are managed independently in silos.
- Level 3 Defined: clear documented processes across each of the eight discipline categories.
- Level 4 Quantitatively Managed: metrics are in place to indicate how well processes are working.
- Level 5 Optimizing: the organization understands its processes, knows its limitations and is accountable for improvement, always changing.

Current State: DENR scored 2.9 on the assessment, which Gartner representatives judged as higher than most of the organizations they had previously assessed in industries other than government. Much of that favorable assessment is attributable to the state-wide infrastructure for application and project portfolio



management and DENR's own governance system within enterprise architecture

Future State: DENR can take the results of the Gartner assessment and move higher on the scale. While the resources needed to achieve a perfect score may not be available, DENR's application organization can aspire to achieve a solid level 3 or 4.

Change State: DENR ITS will focus on elements of improvement such as better documentation, defined process and basic metrics.

Barriers to Success: Resources

4. Technology Initiatives

Although business drives technology investments in DENR, the agency conforms to state-wide mandates and initiatives as required. DENR adjusts priorities within available resource capacity to meet state requirements. Three such requirements are currently being addressed:

a. iWise to Remedy Migration

DENR uses iWise for incident management in limited segments of the organization. This is a legacy of the decentralized state of DENR prior to July 1, 2008 when each division managed their own support infrastructure. In the near term, DENR will participate in the state implementation of Remedy. Cost is currently unknown, but is estimated to be approximately \$3,000 per month. DENR will begin using Remedy before the end of calendar year 2008.

b. NCMail to Exchange Migration

In 2009, support for NCMail will discontinue. All agencies will begin using MS Exchange for integrated email and calendaring. DENR is developing a strategy for migration and assessing the anticipated cost. Cost is projected to be approximately \$220,000 per year. DENR is scheduled for onboarding in November 2008.

c. Compliance with new State-wide Encryption Standards DENR has not yet enforced encryption standards on equipment that may contain sensitive or confidential data, but relied on best practices and careful handling. DENR has begun addressing the need for encryption and will conform to the state standard by end of the current fiscal year.



VI. Appendices

Appendix A State Mandate for Information Technology Planning

§ 147-33.72B. Planning and financing State information technology resources.

- (a) In order to provide a systematic process for meeting the State's technology needs, the State Chief Information Officer shall develop a biennial State Information Technology Plan (Plan). The plan shall be transmitted to the General Assembly by February 1 of each regular session.
 - (b) The Plan shall include the following elements:
 - (1) An inventory of current information technology assets and major projects currently in progress. As used in this subdivision, the term "major project" includes projects subject to review and approval under G.S. 147-33.72C, or that cost more than five hundred thousand dollars (\$500,000) to implement.
 - (2) An evaluation and estimation of the significant unmet needs for information technology resources over a five-year time period. The Plan shall rank the unmet needs in priority order according to their urgency.
 - (3) A statement of the financial requirements posed by the significant unmet needs, together with a recommended funding schedule for each major project currently in progress or recommended for initiation during the upcoming fiscal biennium.
 - (4) An analysis of opportunities for statewide initiatives that would yield significant efficiencies or improve effectiveness in State programs.
- (c) Each executive agency shall biennially develop an agency information technology plan that includes the information required under subsection (b) of this section. The Office of Information Technology Services shall consult with and assist agencies in the preparation of these plans. Each agency shall submit its plan to the State Chief Information Officer by October 1 of each even-numbered year. (2004-129, s. 2.)



Appendix B: DENR Strategic Plan

DENR Mission

To conserve and protect North Carolina's natural resources and to maintain an environment of high quality, for the health, well being and benefit of all.

DENR Vision

North Carolina – Green and Growing!

DENR Strategic Directions

- 1. One North Carolina naturally: statewide land and water conservation initiative
 - a. Planning, mapping and guidance for statewide conservation
 - i. Continued development and use of Conservation Planning Tool
 - b. Spending authorized funds wisely and well
 - c. Stewardship of conservation lands
 - d. Coastal Habitat Protection Plan implementation
 - e. Waterfront access implementation
 - f. Conservation on private lands
 - i. Forestland
 - ii. Farmland
- g. DuPont State Forest: plan for the future
- 2. Advancing organizational effectiveness
 - a. Green Square
 - b. BEACON
 - c. IT consolidation
 - d. Diversity
 - e. Performance solutions
 - f. Building internal auditing capacity
 - g. GICC recommendations for geospatial data sharing
- 3. Water for the future
 - Enactment and implementation of Governor Easley's three part drought legislation proposals
 - i. Modernize public water systems
 - ii. Promote water conservation and efficiency
 - iii. Improve our ability to respond to water emergencies
 - b. Protecting our waters
 - i. Coastal stormwater rules
 - ii. Jordan Lake watershed rules
 - iii. ERC's Water Allocation Study
 - iv. CAMA issues, including enforcement of rules requiring removal



of sandbags for erosion control after 2 – 5 years

- v. Plan for sustainable water use by river basin
- 4. Advancing environmental education
 - a. Zoo: advance capital projects
 - b. Museum of Natural Sciences: Nature Research Center
 - c. Environmental education:
 - i. Certification program improvements
 - ii. State environmental education plan
 - d. Aquariums: advance 3 pier projects
- 5. Improving air quality and responding to climate change
 - a. Lead NC effort on important rulemaking, e.g. change in ozone standard
 - b. Set up organizational vehicle to guide and sustain DENR's efforts to respond to climate change
 - c. Participate in Climate Registry
- 6. Progressing toward sustainability
 - a. Advance state military partnerships
 - i. SERPPAS
 - ii. Sustainable Sandhills BRAC RTF RLUAC
 - iii. Onslow Bight Conservation Forum
 - b. Land conservation and place-based economic development initiatives along Catawba / Johns River and Yadkin / Pee Dee River
 - c. Advance the Environmental Stewardship Initiative
 - d. Pursue SC / NC project on mercury
 - e. Support development of EMC recommendations on regualtion of alternative energy sources
- 7. Protecting groundwater and restoring contaminated properties
 - a. Implement solid waste disposal tax (effective July 1)
 - b. Initiate program to identify, assess, and remediate old landfills
 - c. Improved management of contaminated sites (development of a consistent protocol for on-going groundwater monitoring)



Appendix C: Asset Inventory

Desktop/Laptop/Printer Inventory							
	#		Local				
Division	Desktops	# Laptops	Printers	Network Printers			
PP&EA	22	24	1%	99%			
DWQ - CG&L	30	3	28%	72%			
DWQ - Archdale	54	28	85%	15%			
DWQ - Parkview	23	Included above	Included above	Included above			
DWQ - 2728 Capital	19	Included above	Included above	Included above			
DWQ - Ashley House	8	Included above	Included above	Included above			
DWQ - Chem Lab	37	15	60%	40%			
DWQ-ESS	62	10	0%	100%			
DLR	10	11	23%	77%			
DLR - NC Geological Survey	6	0		100%			
DLR - NC GS Raleigh Field Office	5	3	25%	75%			
DLR - NC Geodetic Survey	21	4		100%			
DSWC	10	16	64%	36%			
EEP	50	35	25%	75%			
DWM - CO	214	154	40%	60%			
DWM - UST	76	15	45%	55%			
DAQ	150	50	36%	64%			
DEH	250	200	45%	55%			
DEH - RPS - 3825 Barrett Dr	15	33	8%	92%			
DEH - RPS - Teleworkers	0	10	100%				
DWR	36	26	50%	50%			
DFR	355	335	75%	15%			



MNS	144	30	10%	90%
DPR	328	105	2%	98%
DCM - CO	8	7		100%
CGIA	9	16	50%	50%
DMF	223	125	37%	63%
NCA - CO	11	10	90%	10%
NCA - FF	46	8	86%	14%
NCA - PKS	40	27		100%
NCA RI	57	9	30%	70%
ZOO	119	14	72%	28%
CSC 2728 Capital	4	4		100%
OTS	18	11	85%	15%
OGC	6		66%	33%
OLA	1	1		100%
OPA	5		80%	20%
DHR	17	4	71%	29%
BPA	7	4	83%	17%
ITS	40	15	71%	29%
OOC	26	9	70%	30%
OEE/Library	12	3	43%	57%
DPS	17	10	84%	16%
CCA/NHP on 14th	9	6	75%	25%
NHP on 4th	15	4	83%	17%
CCA Teleworkers	2	2	n/a	n/a
CWMTF CO and				
Teleworkers	0	23	85%	15%
ARO	106	43	82%	18%
FRO	75	27	35%	65%
MRO	88	38	66%	34%
RRO	94	35	35%	65%
WARO	176	47	68%	32%
WiRO	104	41	35%	65%
WSRO	91	24	43%	57%
Totals	3351	1674		



			Server Invento	•		
Unit	MFGR.	MODEL	OS	PURCH. DATE	WARRANTY EXP.	Primary Software
		PowerEdge				
DENR ITS	Dell	2650 PowerEdge	W2003 sp2	9/7/2005	9/6/2009	Citrix
	Dell	2800 PowerEdge 2800 PowerEdge	W2003 sp2	3/21/2005	3/20/2008	Unknown
	Dell		W2003 sp2	3/21/2005	3/20/2008	Unknown
	Dell	2800	W2003 sp2	3/21/2005	3/20/2008	Unknown
		PowerEdge	Linux	Unknown	Unknown	Unknown
	Dell	2650 VMware Virtual	W2003 sp2	5/5/2006	5/4/2009	Java
		Platform VMware Virtual	W2003 R2 SE SP2	N/A	N/A	Java
		Platform	W2003 R2 SE SP2	N/A	N/A	
	Dell	PowerEdge 2850	W2003 R2 SE SP2	12/2/2006	12/1/2008	Java
		VMware Virtual Platform	W2003 SE SP2	N/A	N/A	Java
			W2003 R2 SE SP2	N/A	N/A	Java
			W2003 R2 SE SP2	N/A	N/A	Virtual Center
			W2003 R2 SE SP2	N/A	N/A	MOSS
	PowerEdge Dell 2650		W2003 R2 SE SP2	6/17/2005	6/16/2009	Oracle
		VMware Virtual Platform	W2003 R2 SE SP2	N/A	N/A	Weblogix
		VMware Virtual Platform	W2003 sp2	N/A	N/A	Unknown
		VMware Virtual				Onknown
		Platform VMware Virtual	W2003 R2 SE SP2	N/A	N/A	
		Platform PowerEdge	W2003 R2 SE SP2	N/A	N/A	
	Dell	2650 PowerEdge	W2003 sp2	6/17/2005	6/16/2009	Oracle
	Dell 2850 Powe Dell 2950	2850	W2003 sp2 R2	1/18/2005	1/17/2009	Oracle
		PowerEdge 2950	W2003 x64 R2 SP2	9/12/2006	9/11/2009	Oracle
		VMware Virtual Platform	W2003 x64 R2 SP2	N/A	N/A	
		VMware Virtual Platform	W2003 R2 SE SP2	N/A	N/A	
	Dell	PowerEdge 2850	W2003 R2 SE SP2	12/30/2006	12/29/2008	Windows AD



	VMware Virtual Platform	W2003 R2 SE SP2	N/A	N/A	Windows AD
Dell	PowerEdge 2850	W2003 R2 SE SP2	12/2/2005	12/1/2008	Windows AD
	VMware Virtual Platform	W2003 R2 SE SP2	N/A	N/A	Windows AD
	VMware Virtual Platform VMware Virtual	W2003 R2 SE SP2	N/A	N/A	Windows AD
	Platform	W2003 R2 SE SP2	N/A	N/A	Windows AD
	Vmware Virtual Platform Vmware Virtual	W2003 SE SP2	N/A	N/A	Windows AD
	Platform	W2003 SE SP2	N/A	N/A	Windows AD
Dell	PowerEdge 1650 PowerEdge	W2003 R2 SE SP2	Unknown	Expired	Windows AD
Dell	2650	W2003 R2 SE SP2	5/5/2004	5/4/2009	
Dell	PowerEdge 2850 PowerEdge	W2003 sp2	1/18/2006	1/17/2009	Windows file/print
Dell	2950	W2003 R2 SE SP2	9/12/2006	9/11/2009	Windows file/print
	VMware Virtual Platform VMware Virtual	W2003 R2 SE SP2	N/A	N/A	WSUS
	Platform	W2003 R2 SE SP2	N/A	N/A	SCCM
Dell	PowerEdge 2850	W2003 R2 SE SP2	1/18/2006	1/17/2009	Symantec Ghost
Dell	PowerEdge 2950	W2003 R2 SE SP2	9/12/2006	9/11/2009	BE12
20	VMware Virtual				
	Platform PowerEdge	W2003 R2 SE SP2	N/A	N/A	SCCM
Dell	2650 PowerEdge	W2003 R2 SE SP2	10/24/2004	10/23/2008	Unknown
Dell	2850	W2003 R2 SE SP2	1/18/2006	1/17/2009	
	VMware Virtual Platform VMware Virtual	W2003 R2 SE SP2	N/A	N/A	Windows file/print
	Platform	W2003 R2 SE SP2	N/A	N/A	Business Objects
Dell	PowerVault NX 1950 PowerVault NX	WUDS 2003 sp2	6/5/2007	6/4/2010	WUDSS
Dell	1950	WUDS 2003 sp2	6/5/2007	6/4/2010	WUDSS
Dell	PowerEdge 2950 PowerEdge	VMWare ESX 3.5.0	3/6/2007	3/5/2010	VMWare ESX
Dell	2950	VMWare ESX 3.5.0	6/5/2007	6/4/2010	VMWare ESX
Dell	PowerEdge 2950	VMWare ESX 3.5.0	6/5/2007	6/4/2010	VMWare ESX
	VMware Virtual	W2003 R2 SE SP2	N/A	N/A	Java
	VMware Virtual Platform	W2003 R2 SE SP2	N/A	N/A	
	VMware Virtual Platform	W2003 R2 SE SP2	N/A	N/A	
Dell	PowerEdge 2850	W2003 R2 SE SP2	12/2/2005	12/1/2008	
	VMware Virtual Platform	W2003 R2 SE SP2	N/A	N/A	



Dell	Vmware Virtual Platform PowerEdge	W2000 AS sp4	N/A	N/A
Dell	2400	NW 5.1 sp5	Unknown	Expired
Dell	PowerEdge 2400/533	W2000 sp4	Unknown	Expired
Dell	PowerEdge 2650	Linux 2.4.21- 4.Elsmp	10/4/2005	10/3/2009
Dell	PowerEdge 2400/533	W2000 sp4	Unknown	Expired
Dell	PowerEdge 4600	W2000 sp4	Unknown	Expired
Dell	PowerEdge 2650	W2003 sp2	10/26/2004	10/25/2008
	VMware Virtual Platform	W2003 sp2	N/A	N/A
	Vmware Virtual Platform	W2000 sp4	N/A	N/A
Dell	PowerEdge 2650	W2000 sp4	10/26/2004	10/25/2008
Dell	PowerEdge 2650	W2003 sp2	5/5/2004	5/4/2009
Dell	PowerEdge 2650	W2003 sp2	5/5/2004	5/4/2009
Dell	PowerEdge 2850	W2003 R2 SE SP2	1/18/2006	1/17/2009
	VMware Virtual Platform	W2003 R2 SE SP2	N/A	N/A
	VMware Virtual Platform	W2003 sp2	N/A	N/A
	VMware Virtual Platform	W2003 SE SP2	N/A	N/A
	VMware Virtual Platform	W2003 sp2	N/A	N/A
Dell	PowerEdge 2650	W2003 sp2	5/5/2004	5/4/2009
Dell	PowerEdge 2850	W2003 sp2	12/2/2005	12/1/2008
Dell	PowerEdge 2650	W2003 sp2	1/22/2005	Expired
Dell	PowerEdge 2850	W2003 sp2	1/12/2006	1/11/2009
Dell	PowerEdge 2950	W2003 sp2	9/18/2006	9/17/2009
Dell	PowerEdge 2950	W2003 sp2	10/29/2006	10/28/2009
Dell	PowerEdge 2950	W2003 sp2	9/18/2006	9/17/2009
Dell	PowerEdge 2950	W2003 sp2	9/18/2006	9/17/2009
Dell	PowerEdge 2650	W2003 SE SP2	5/5/2004	5/4/2009
	VMware Virtual Platform	W2003 sp2	N/A	N/A
Dell	PowerEdge 1650	NW 6.5 sp3	Unknown	Unknown
Dell	PowerEdge 2650	NW 5.1	Unknown	Unknown
Dell	PowerEdge 2650 PowerEdge	Linux RH ES 5.0	5/5/2004	5/4/2009



	Dell Dell	PowerEdge 2950 PowerEdge 840	VMWare ESX 3.5.0 W2003 Sp2	6/5/2007 12/1/2006	6/4/2010 11/30/2009	
WARO	Dell	Power Edge 2600	Netware 6.5 SP6	11/1/2003	11/2009	Netware
DWQ Chem Lab.	Dell	Poweredge 2600	novell Netware 5	Unknown	Unknown	
NC Zoo	HP	DL 360	W2003 Ent. sp2	2002	Expired	Windows Server 2003 Enterprise Edition SP 2 Windows Server
	HP	DL 360	W2003 Ent. sp2	2002	Expired	2003 Enterprise Edition SP 2 Ultrabac backup
	HP	DL 360	W2003 Ent. sp2	2002	Expired	software LANDesk, Trend
	HP HP HP HP HP	DL 360 DL 360G3 DL360G5 DL 380 DL 380G5 DL 360G5	W2003 Ent. sp2 W2003 Ent. sp2 W2003 Ent. sp2 W2003 Ent. sp2 W2003 Ent. sp2 W2003 Ent. sp2	2002 2003 Dec-07 2002 Dec-07 Dec-07	Expired Expired Dec-10 Expired Dec-10 Dec-10	Micro AV, PTRG, Websense Cisco CSA Manager MS SQL MS SQL IIS
	IBM NetApp	x325 3020	W2003 Ent. sp2 SnapOS 7.0.5	Unknown 2002	Expired Expired	Cold Fusion, Serena Collage CMS
DAQ	DELL DELL DELL DELL DELL DELL DELL DELL	PE2850 PE2850 PE1400 PE2450 PE840 PE2450 PE2850 PE840 PE2850 PE2900 PE2900	NOVELL 6.5 NOVELL 6.5 NOVELL 5.1 N/A WIN2003 R2 WIN2003 R2 WIN2003 R2 WIN2003 R2 WIN2003 R2 WIN2003 R2 WIN2003 R2 WIN2003 R2	3/11/2005 3/11/2005 10/3/2001 1/22/2001 2/2/2007 1/22/2001 12/30/2005 10/8/2007 12/30/2005 9/4/2008 9/4/2008	3/10/2010 3/10/2010 Expired Expired 2/1/2010 Expired 12/29/2008 10/8/2010 12/29/2008 9/4/2011 9/4/2011	Novell Novell Novell Windows Windows Windows Windows Windows Windows
MRO	Dell	PowerEdge 2600	NW5.1	10/18/2003	10/16/2008	
DWQ	dell	OptiPlex GX280 PowerEdge	w2k3	3/5/2006	3/4/2009	
	dell dell	2400 OptiPlex GX280 PowerVault	w2k3 w2k3	4/28/2001 5/9/2009	4/28/2004 5/11/2007	
	dell	775N PowerEdge	w2k3	5/25/2005	5/25/2008	
	dell	R200 PowerEdge	w2k3	6/10/2008	6/10/2013	
	dell dell	2800 OptiPlex GX280	w2k3 w2k3	2/7/2006 3/5/2005	2/6/2009 3/4/2009	
	dell	PowerEdge 2650 PowerEdge	w2k3	9/7/2004	9/6/2009	
	dell dell	1850 PowerEdge	w2k3 w2k3	4/29/2005 4/29/2006	4/28/2008 4/28/2008	



	dell Sun Sun Sun	1850 PowerEdge 1850	w2k3 Solaris Solaris	4/29/2005	4/28/2008	
	dell	PowerEdge 1850	Solaris w2k3	4/29/2005	4/28/2008	
	dell	PowerEdge 1950 PowerEdge	w2k3	10/31/2007	10/31/2011	
	dell	1850 PowerEdge	w2k3	4/29/2005	4/28/2008	
	dell	1850 PowerEdge	w2k3	4/29/2005	4/28/2008	
	dell	1950 PowerEdge	w2k3	10/31/2007	10/31/2011	
	dell	R200 PowerEdge	w2k3	6/10/2008	6/10/2013	
	dell	2950 PowerEdge	w2k3	1/7/2008	1/7/2013	
	dell	2950 PowerEdge	w2k3	11/30/2007	11/30/2010	
	dell	4600 Dell Precision	w2k3	11/22/2003	11/20/2008	
	dell	350 PowerEdge	w2k3	3/21/2003	3/20/2006	
	dell	1950 PowerEdge	w2k3	10/31/2007	10/31/2011	
	dell	1850 PowerEdge	w2k3	4/29/2005	4/28/2008	
	dell	1850 PowerEdge	w2k3	5/4/2005	5/3/2008	
	dell	1850 PowerEdge	w2k3	4/29/2005	4/28/2008	
	dell	2600 PowerEdge	w2k3	7/11/2003	7/9/2008	
	dell Gateway	1850 E4300	w2k3 XP	4/29/2005 Unknown	4/28/2008 Unknown	
DWR	Dell	PowerEdge 2650 PowerEdge	NOVELL Netware 6	Oct. 2004	10/11/2008	
	Dell	2650 Power Edge	NOVELL Netware 6 NOVELL Netware	May 2003	5/25/2008	
	Dell	2650 PowerEdge	6.5 Red Hat Ent. Linux	Oct. 2004	10/12/2009	BackupExec
	Dell	2650	5	May 2003	5/25/2008	Apache
	Dell	Power Edge 2650	Red Hat Ent. Linux 5	Oct. 2005	10/13/2009	MySQL
	Dell	Power Edge 2850	W2003	April 2005	4/14/2009	OASIS Cape Fear Model
	Dell	Power Edge 2850	Red Hat Ent. Linux	April 2005	4/14/2008	UMN Mapserver
	SNAP	4500	GuardianOS4.2.054 SP3	April 2005	3/9/2008	CHEOPS Model
DEH RPS	Dell Dell Dell Dell	GX240 PE2950 PE2650 PE2850 PE2650	W2000 SP4 W2003 SP2 W2003 SP2 Novell W2003 SP2	6/6/2002 4/17/2008 2/9/2005 8/11/2005 10/5/2003	6/6/2005 4/17/2011 2/9/2008 8/11/2008 10/3/2008	EBI WS2003 IIS6 Netware WS2003



ADO	DELL	PowerEdge	W0000 D0 CE CD0	4/44/0000	0/00/0040	Windows Server
ARO	DELL	R200 PowerEdge	W2003 R2 SE SP2	4/11/2008	9/20/2010	2003 Windows Server
	DELL	R200 PowerEdge	W2003 R2 SE SP2	4/11/2008	9/20/2010	2003 Windows Server
	DELL	2900 PowerEdge	W2003 R2 SE SP2	5/4/2007	5/2/2012	2003 Windows Server
	DELL	2900	W2003 R2 SE SP2	6/6/2007	6/4/2012	2003
	DELL	PowerVault MD1000	W2003 R2 SE SP2	5/31/2007	5/29/2012	Windows Server
	DELL	PowerEdge 2950	W2003 R2 SE SP2	4/9/2008	4/9/2011	Windows Server 2003
	DELL	PowerEdge 4600	NetWare 5.1	6/7/2002	Expired 6/8/2007	NetWare 5.1
	Snap	Snap Server 4500 1.6TB	Guardian OS 4.0.228 SP2	2/21/2006	2/21/2009	Guardian OS 4.0.228 SP2
	Snap	Snap Server 4500 1.6TB	Guardian OS 4.0.228 SP2	2/21/2006	2/21/2009	Guardian OS 4.0.228 SP2
WSRO	DELL	PE4600	NW 5.1	Jun-04	Jun-09	Netware 5.1
						Netware 5.1
DWQ CG&L	HP	ML370T03	Novell 5.1	10/10/2002	10/10/2005	
UST	Dell	PowerEdge 2600	6.5	5/1/2003	5/1/2006	Netware
EEP	Dell Dell Dell Dell Dell	PE2850 PE2650 PE2650 PE2650 132T	W2003 SP2 W2003 SP2 W2003 SP2 W2003 SP2	Oct-05 Sep-05 Jun-05 Jun-05	3/9/2010 12/4/2009 12/4/2009 12/4/2009	SQL Server EE and GIS License Manager NONE NONE NONE
RRO	DELL	Proliant 2800	6.5	Oct-04	Oct-09	Netware
	Dell	PowerEdge 2650 PowerEdge	W2003 SP2	7/12/2004	7/11/2009	IIS
	Dell	2650 PowerEdge	W2003 SP2	10/1/2004	9/30/2009	IIS
	Dell	2650 PowerEdge	W2003 SP2	10/1/2004	9/30/2009	ArcIMS
	Dell	2650 PowerEdge	W2003 SP2	10/1/2004	9/30/2009	ArcIMS
	Dell	2950 PowerEdge	W2003 SP2	5/3/2007	5/2/2010	LizardTech
	Dell	6650 PowerEdge	W2003 SP2	7/12/2004	7/11/2009	SQL Sr 2k
	Dell	2650	W2003 SP2	10/1/2004	9/30/2009	SQL Sr 2k
	Dell	PowerEdge 2950	W2003 SP2	5/3/2007	5/2/2010	VMWare
	Dell	PowerVault 745N	W2003 SP2	9/30/2004	9/29/2008	NAS O/S
	Compaq Compaq Compaq	Proliant 1600 Proliant 1600 Proliant 1500 Dell PowerEdge	Novell 5 Windows NT 4.0 Novell 5	9/1/1999 10/1/1999 5/1/1997	expired expired expired	Novell Novell Novell
	Dell	2600	Novell 6	12/1/2003	expired	Novell



	Dell	Dell PowerEdge 2950	W2003	4/1/2007	10/1/2009	Windows Server 2003
FRO	Dell	2600	6.5	10/2004	10/2008	Netware
WIRO	Dell	2600	5.1	10/2004	10/2008	Netware
DCM	IBM IBM IBM IBM Dell Dell	x236 x236 5100 PC300 5600 2850 2850	W2003 W2003 2000 Adv. Server Netware 5.1 Netware 5.1 W2003 W2003	2006 2006 2001 2000 2001 2004 2005	2009 2009 expired expired expired expired 2008	
DPPEA	Dell	Poweredge 1650	W2003 SE SP2	9/25/2002	9/24/2007	AD,DNS, DHCP Adobe Capture 3.0
	Dell	Poweredge 350	W2000 Pro SP4	6/3/2003	6/2/2008	Cluster Edition MS SQLServer
	Dell	Poweredge 2850 Poweredge	W2003 SE SP2	10/10/2005	10/9/2008	2000; AD, DNS
	Dell	2850 Poweredge	W2003 SE SP2	9/10/2005	9/9/2008	MS Exchange 2003
	Dell	2650	W2003 SE SP2	9/21/2004	9/20/2009	MS IIS 6 CVS (version control
	Compaq Google	Proliant Google Mini	Debian Linux proprietary (Linux)	Unknown 3/7/2007	expired 3/7/2009	software) Google proprietary
DMF	HP	DL380	NOVELL 6.5	MaPS	MsPS	Novell Netware 6.5 Veritas Backup Exec Geo911 CAD Application
	HP HP	DL380 DL380	2000 2003	MaPS MaPS	MsPS MsPS	SQL Server 2000 Veritas Backup Exec IIS Crystal Enterprise Framework 1.0
	HP	DL380	2003	MaPS	MsPS	Support ToolsNET, Vault SQL Server 2000 C++ Business Layer Apps MQ Series 5.3 Support Tools - Visual Studio 97
	HP HP	DL380 DL380	2003 2003	MaPS MaPS	MsPS MsPS	(VB, C++), Sourcesafe SQL Server 2000 SQL Server 2000 C++ Business Layer Apps MQ Series 5.3 Support Tools - Visual Studio 97 (VB, C++),
	HP	DL380	2003	MaPS	MsPS	Sourcesafe FIN Business Layer
	HP	DL380	2000	MaPS	MsPS	(C++)



						SQL Server 2000 C++ Business Layer Apps MQ Series 5.3 Framework 1.0 Support Tools - Visual Studio 97 (VB, C++), Sourcesafe, .NET,
	HP HP HP	DL380 DL380 DL380 DL380	2003 2003 2003	MaPS MaPS MaPS	MsPS MsPS MsPS	Vault SQL Server 2000
	HP		2003	MaPS	MsPS	Geo911 CAD Application SQL Server 2000
	HP	DL380	2003	MaPS	MsPS	Veritas Backup Exec
	HP	DL380	2003	MaPS	MsPS	Veritas Backup Exec
	HP HP HP COMPAQ	DL380 DL380 DL380 ML570	2003 2003 2003 NT 4	MaPS MaPS MaPS MaPS	MsPS MsPS MsPS MsPS	Veritas Backup Exec OS only OS only NT 4.0
	COMPAQ		2000		Out of warranty	PC SAS
	COMPAQ		2000		Out of warranty	OS only
	COMPAQ		2000		Out of warranty	OS only
	COMPAQ		2000		Out of warranty	OS only
	COMPAQ HP		2000 XP		Out of warranty In warranty Out of	OS only IIS, SAS
	Dell	Precision 350	2000		warranty	IIS
DPR	Dell	PowerEdge 2600 PowerEdge	Novell 5.1	2003	expired	Novell 5.1
	Dell	2600	Novell 5.1	2003	expired	Novell 5.1
	Clone	Pentium III Mac G4	Novell 5.1 OS X	2003 1999	expired	Novell 5.1 *AMP
	Apple Apple	Mac G4	OS X	1999	expired expired	*AMP
	Apple	Mac G4	OS X	1999	expired	*AMP
	Apple	Mac G3	OS 9	1997	expired	WebStar
NHP	Dell	PowerEdge 2600	RHEL	10/21/2003	10/19/2008	Oracle 9i
DEH	Dell	Dell PowerEdge 2450 PowerVault	W2003	12/27/2000	12/27/2003	
	Dell Dell	725N DELL	W2003 W2003	7/11/2003 12/6/2000	7/11/2003 12/6/2003	
	Dell	Dell Poweredge 2850	W2003	6/29/2006	6/19/2009	
	Dell Dell	PowerEdge 1850 PowerApp web	W2003 W2003	11/19/2007 12/22/2000	11/19/2008 11/19/2008	



		100				
	Dell Dell Dell	PowerEdge4400 Dell Dell	W2003 Linux Linux	12/27/2000 12/17/2000 5/12/2003	12/27/2003 12/27/2003 5/13/2006	
	Dell	PowerEdge6600 PowerEdge	W2003	12/1/2003	9/30/2006	
	Dell Dell	2950 PowerEdge2650	W2003 Novell Netware	10/6/2006 9/22/2003	10/10/2009 9/26/2006	
	Dell	PowerVault 725N PowerEdge	W2003	7/11/2003	7/10/2006	
	Dell Dell	2850 PowerEdge 860	W2003 W2003	5/1/2006 8/8/2008	5/9/2009 8/8/2010	
DFR	DELL DELL	2600 4600	5.1 5.1	2005 2005	2008 2008	NOVELL NOVELL
	DELL DELL	2800 2800	2003 5.1	2005 2005	2008 2008	WINDOWS NOVELL
	DELL	2800	5.1	2005	2008	NOVELL
	DELL DELL	2800 2800	5.1 5.1	2005 2005	2008 2008	NOVELL NOVELL
	DELL	2600	5.1	2004	2007	NOVELL
	DELL DELL	2600 2800	5.1 5.1	2004 2005	2007 2008	NOVELL NOVELL
	DELL	2600	5.1	2004	2007	NOVELL
	DELL	2600	5.1	2004	2007	NOVELL
	DELL	2600	5.1	2004	2007	NOVELL
	DELL	2800	5.1	2005	2008	NOVELL
	DELL DELL	2850 2800	5.1 5.1	2006 2005	2009 2008	NOVELL NOVELL
	DELL	2800	5.1	2005	2008	NOVELL
	DELL	2800	5.1	2005	2008	NOVELL
	DELL	2600	5.1	2004	2007	NOVELL
	DELL	2600	5.1	2004	2007	NOVELL
	DELL	2600	5.1	2004	2007	NOVELL
NOA	D-II	PowerEdge	Naturan	2000	N1/A	Natura
NCA	Dell	2400	Netware	2000	N/A	Netware
Museum	HP	DL 380	Novell 5.11 SP8	8/9/2005	8/15/2008	
	HP	DL180G5	Novell 5.11 SP8	9/16/2008	9/22/2009	
	HP	DL380	Novell 5.11 SP8	8/9/2005	8/15/2008	
		DL180G5	Novell 5.11 SP8	9/16/2008	9/22/2009	
DWM	Dell	PE 4600	Netware 6.5	9/1/2004	10/7/2009	Netware tools
	Dell	PE 2600	Netware 6.5	7/11/2003	7/10/2008	Netware tools/Apache/Tomcat
	Dell	PE 2600	MS Server 2003	5/1/2004	6/1/2009	GIS Apps/Ftp
	Compaq	Proliant 530	MS Server 2000	5/1/2002	expired	IIS
	Compaq	Proliant 370	MS Server 2000	4/1/2002	expired	App Extender/SQL
	Dell	PE 2900	MS Server 2003	2/1/2007	2/1/2012	SQL
	Dell	PE 2900	MS Server 2003	9/1/2007	9/1/2010	GIS Apps/Ftp

Network Inventory				
Business Unit	Network Devices	Type (Switch, hub, etc.)	Age	



DENR ITS

	Dell PowerConnect 3448	Switch	2 yr.
	APC	UPS	Unknown
	Dell PowerConnect 3448 Bay Networks 24 Port	Switch	2 yr.
	10BaseT	Hub	Unknown
	APC	UPS	Unknown
	Bay Networks 450-24	Switch	Unknown
	Dell PowerConnect 3448 (13) Dell PowerConnect	Switch	2 yr.
	5x24	Switch	1 - 2 yr.
	Dell PowerConnect 3448	Switch	2 yr.
	Bay Networks 350T-16	Switch	Unknown
	(2) Raritan Dominion KX II	IP KVM	1 yr.
	Bay Networks 350T-16	Switch	Unknown
	Nortel 450-24	Switch	Unknown
	Dell PowerConnect 3448	Switch	2 yr.
	Dell PowerConnect 5324	Switch	1 yr.
	APC	UPS	Unknown
	Dell PowerConnect 3448	Switch	2 yr.
	APC	UPS	Unknown
	Bay Networks 350T-16	Switch	Unknown
	Nortel 325/24G	Switch	Unknown
	APC	UPS	Unknown
	Dell PowerConnect 3448	Switch	2 yr.
	APC	UPS	Unknown
	Dell PowerConnect 3448 Bay Networks 24 Port	Switch	2 yr.
	10BaseT	Hub	Unknown
	APC	UPS	Unknown
WARO	Router Cisco 2800 Switch Dell Power Connect	Router	2 yr.
	3324 Switch Dell Power Connect	switch	3 yr.
	3324 Switch Dell Power Connect	switch	3 yr.
	3324 Switch Dell Power Connect	switch	3 yr.
	3324 Switch Dell Power Connect	switch	3 yr.
	3324 Switch Dell Power Connect	switch	3 yr.
	3324	switch	3 yr.



	Switch Dell Power Connect 3324	switch	3 yr.
	Switch Dell Power Connect 3324	switch	2
	Switch Dell Power Connect	SWILCH	3 yr.
	3448 Switch Dell Power Connect	switch	1 yr.
	5324	switch	3 yr.
	APC UPS SUA1400RMNET	UPS	> 7 yr.
	APC UPS SUA1400RMNET	UPS	> 7 yr.
	APC UPS SUA1400RMNET	UPS	> 7 yr.
	APC UPS SUA1500RM2U	UPS	1 yr.
	Castelle Fax Server 5000	Appliance	> 7 yr.
DWQ	Switch Dell Power Connect		
Chem.Lab.	5324	switch	new
	Switch Dell Power Connect	** 1	
	5324 Switch Dell Power Connect	switch	new
	5324	switch	now
NC Zoo	3324	SWITCH	new
140 200	Cisco 4507R switch (core		
	switch)	switch	5
	SEB Cisco 2950 switch #1	switch	5
	SEB Cisco 2950 switch #2	switch	5
	SEB Cisco 2950 switch #3	switch	5
	RKY Cisco 2950 switch	switch	5
	SOD Cisco 2950 switch	switch	5
	NAE Cisco 2950 switch	switch	5
	HVH Cisco 2950 switch	switch	5
	JUN Cisco 2950 switch	switch	5
	AVI Cisco 2950 switch	switch	5
	CMP Cisco 2950 switch	switch	5
	SSN Cisco 2950 switch	switch	5
	SSC Cisco 2950 switch	switch	5
	GNH Cisco 2950 switch	switch	5
	AEC Cisco 2950 switch	switch	5
	RAN Cisco 2950 switch	switch	5
	SAF Cisco 2950 switch	switch	5
	TSP Cisco 2950 switch	switch	5
	SWH Cisco 2955 switch	switch	5
	WRC Cisco 2950 switch	switch	1
	AVP Cisco 2950 switch	switch	1
	MAH Cisco 2960 switch	switch	1
	ELE Cisco 2960 switch	switch	1
	SON Cisco 2960 switch	switch	1
	SSS Cisco 2955 switch	switch	1
	Quantum Superloader 3	tape library	5
	Cisco PIX 515E	firewall	5
	Cisco IDS-4215	IDS	5



security management and Cisco MARS reporting 5 Cisco 1242AG 1 wireless access point Cisco 1242AG wireless access point 1 Cisco 1242AG wireless access point 1 DAQ Switch 1 2 Switch Fiber Converter >6 Fiber Converter >6 Switch 1 2 Switch Switch >6 Switch >6 Fiber Converter >6 Fiber Converter >6 **MRO** Switch (8x) 4 years Router 6 months DWQ 2+ netgear16 Switch netgear16 Switch 2+ Sonicwall TZ170 FW Firewall 2+ **Dell3524** 2+ Switch **Dell3524** 2+ Switch Switch 1 Netgear8 2+ Sonicwall TZ170 FW Firewall Dell16 Switch 2+ Dell16 Switch 2+



Netgear16 Switch 2+ 2+ Netgear16 Switch Netgear16 Switch 2+ Sonicwall TZ170 FW Firewall 2+ Dell 1324 switch Switch 2+ Dell 1324 switch Switch 2+ Netgear16 switch Switch 2+ Baystack 450-24T Switch **Dell2624** Switch 2+ Dell2624 Switch 2+ **Dell 5324** Switch 2+ **Dell 5324** Switch 2+ **Dell 5324** Switch 2+ **Dell 5324** Switch 2+ Dell 5324 Switch 2+ Dell 5324 Switch 2+ **Dell 5324** 2+ Switch **Dell 5324** Switch 2+ **Dell 5324** Switch 2+ 2+ Sonicwall Pro2040 FW Firewall Baystack 450-24T Switch 5+ Switch 5+ Baystack 450-24T 5+ Baystack 450-24T Switch Baystack 450-24T Switch 5+ Dell8 switch 2+ Switch 5+ Baystack 450-24T Switch 2+ Netgear16 Switch Switch Baystack 450-24T Switch 5+ Baystack 450-24T Switch 5+ Netgear16 switch Switch 2+ **DWR** Cisco Pix 515e 5 years 48-Port 10/100 switch 5 years 8-Port 10/100/1000 3 years 48-Port 10/100/1000 3 years 48-Port 10/100/1000 3 years CISCO 2950G Switch **DEH RPS** 3.5 yCISCO 3548XL Switch 6.5 y6.5 y CISCO 3548XL Switch Cisco PIX 515E R DMZ 5 y APC3000 UPS 5 y PowerConnect 2624 (24 Port ARO Switch) 3/18/2004 PowerConnect 2624 (24 Port Switch) 3/18/2004



PowerConnect 2624 (24 Port Switch) 3/18/2004 PowerConnect 2624 (24 Port Switch) 3/18/2004 PowerConnect 2624 (24 Port 3/18/2004 Switch) PowerConnect 2624 (24 Port Switch) 3/18/2004 PowerConnect 2624 (24 Port Switch) 3/18/2004 PowerConnect 5224 (24 Port Switch) 3/18/2004 PowerConnect 5224 (24 Port Switch) 3/18/2004 PowerConnect 2724 (24 Port Switch) 11/16/2005 PowerConnect 2724 (24 Port Switch) 11/16/2005 PowerConnect 5424 (24 Port Switch) 4/7/2008 SWITCH DELL 5224 - 24 **WSRO** 4yrs ports SWITCH DELL 2624 - 24 ports 4yrs SWITCH DELL 2624 - 24 4yrs ports SWITCH DELL 2624 - 24 ports 4yrs SWITCH HP 2124 4yrs DWQ CG&L HP Procurve Switch 2650 5 HP Procurve Switch 2626 5 5 CISCO Firewall PIX 506E 5 Intellinet Media Converter UST BayStack 252 10/100 Hub unknown BayStack 252 10/101 Hub unknown Intellnet 16 port 10/100 Switch 5 yrs Netgear JFS524 10/100 Switch 7 yrs Baystack 450 24 port Switch unknown Baystack 450 24 port Switch unknown Synoptics Lattis 2813 Hub unknown



EEP Cisco 515E **OITS Managed Firewall** Dell 5324 3 Switch Baystack 425 Switch 4 4 Baystack 425 Switch 4 Baystack 425 Switch 4 Baystack 425 Switch Baystack 425 Switch 4 ? Baystack 450 Switch Baystack350 Switch Baystack Hub Hub UPS, 3000VA **UPS** 3 UPS, 3000VA **UPS** 3 UPS, 1400VA **UPS** 4 **RRO** (8) Nortel 450 Switch 8+ years Cisco 2650 3 years **CGIA** Cisco PIX 515E 4 years 48 port switch 3 years 12 port switch 10/100 4 years 4 years 8 port fibre channel 8 port fibre channel 4 years 5 port Netgear Gigabit Switch 4 years 8 port Netgear Ethernet Hub 4 years DLR & **DSWC** Synoptics Lattishub 2803 hub 8 yrs Nortel Networks Baystack 450-24t switch switch 8 yrs Nortel Networks Baystack 450-24t switch switch 8 yrs HP ProCurve Switch 2124 switch 4 yrs NetGear 24Port Fast Ethernet Switch switch 3 yrs Nortel Networks Baystack 450-24t switch switch 8 yrs Nortel Networks Baystack 450-24t switch switch 8 yrs Synoptics Lattishub 2813 hub 8 yrs Synoptics Lattishub 2803 hub 8 yrs **FRO** (8) BayStack 450 8 years **WIRO** (12) Gigabit (brand unknown) 6 years DCM DLINK DES1026 2 years 2 years **DLINK DES1026** Baystack 350 9 years **DLINK DES1026** 1 year Linksys 4 years



D-Link DSS-24 10/100 **DPPEA** Unknown Switch D-Link DSS-24 10/100 Unknown Switch D-Link DSS-24 10/100 Switch Unknown Bay Network 100 Base T Hub Unknown Nortel BayStack 425-24T 100/1000 Switch 4 years Aug-05 **DMF** cisco switch cisco switch Aug-05 cisco switch Aug-05 Aug-05 cisco switch cisco switch Aug-05 Aug-05 cisco switch netgear switch 2005 2005 netgear switch netgear switch 2008 2005 netgear switch 2005 netgear switch cisco switch cisco switch cisco switch hp switch 2008 cisco switch cisco switch cisco switch 2008 hp switch 2008 hp switch 1998 bay networks switch 2005 linksys switch 2004 netgear switch 2005 netgear switch 2005 netgear switch 2006 netgear switch 2005 netgear switch 2008 netgear switch 2008 netgear switch **DPR** Baystack 450-24T 3 2 Baystack 325-24T



NHP		Switch	4 years
DEH		Hub	10yrs
		Switch	2yrs
		Switch	2yrs
		Switch	2yrs
		Switch	1mth
		Switch	5yrs
		Switch	2yrs
		Switch	10yrs
		Switch	2yrs
		Switch	2yrs
DFR		SWITCHES(35)	3-4 YEARS
NCA	Netgear Prosafe 24 port	Switch	2 years
	Netgear Prosafe 24 port	Switch	2 years
	Netgear Prosafe 24 port	Switch	2 years
	Cisco Switch Cat. Express 520	Switch	1 years
	Cisco Router 2600 Series	Router	4 years
Museum		Switch 24 port	3Yrs
		Switch 8 port	1Yrs
		Switch 24 port	1Yrs
		Switch 24 port	3Yrs
		Switch 24 port	3Yrs
		Switch 24 port	5Yrs
		Switch 12 port	5Yrs
		Switch 24 port	5Yrs
		Switch 12 port	5Yrs
		Switch 24 port	5Yrs
		Switch 24 port	5Yrs
		Switch 24 port	5Yrs
		Switch 24 port	1Yrs
		Switch 24 port	3Yrs
		Switch 12 port	5
		Site 1371	011
		Switch 24 port	3Yrs
		Switch 24 port	1Yrs
DWM		Dell 5324 switch	2yrs



Dell 5324 switch	2yrs
Dell 5324 switch	2yrs
Dell 5324 switch	1 1/2yrs
Dell 5324 switch	1 1/2yrs
Dell 5324 switch	1 1/2yrs
Dell 5424 switch	1 yr
Dell 5424 switch	1 yr
Dell 5424 switch	1 yr
Dell 5424 switch	6 months
Dell 5424 switch	6 months
Dell 5424 switch	1 month
printer hub	3yrs
printer hub	3yrs
Cisco 2800 router	
Cisco 515e firewall	4 1/2yrs
Cisco Catalyst 2900	4 1/2yrs

[end of DENR plan]